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IRONY AS A MEANS OF PERCEPTION  
THROUGH COMMUNICATION CHANNELS.  
EMOTIONS, ATTITUDE AND IQ RELATED  
TO IRONY ACROSS GENDER

The paper explores why certain adults are, or at least consider themselves to be, more ironic than others. The study looked at comprehension and application of irony compared to subjective affective evaluation of irony reported by Polish-speaking adults and with relation to nonverbal intelligence measured with the Wechsler Adult Intelligence Scale-Revised-Polish versions (WAIS-R(PL), 2004). Fifty-four subjects aged 20-66 years (28 females and 26 males) participated in Study 1 on subjective perception of irony. The comprehension, emotional valence and social functions of ironic meanings as well as the degree to which subjects perceived themselves as ironic were assessed through a self-report questionnaire. Inter-correlations were performed and related to the performance quotient (IQ) which was measured in Study 2, where 45 (24 females and 21 males) out of the 54 participants were tested with performance subtests of the Wechsler Adult Intelligence Scale-Revised-Polish versions (WAIS-R(PL), 2004). The nonverbal intelligence scale was administered. Performance on nonverbal intelligence tests is not limited by language abilities and its analysis and can be considered important for future cultural comparative studies. Subjects who perceived themselves as ironic showed a higher nonverbal IQ in comparison to subjects who described themselves as non-ironic or barely ironic. The pragmatic qualities of irony were analyzed for their affective valuation and balanced for gender. Individual differences and gender effects in the perception of the social functions of ironic utterances were found. The paper describes the implicit emotional layer conveyed in irony and its importance in irony processing and comprehension.

*Key words:* irony, irony comprehension, emotions, attitude, IQ, gender

*...irony, like beauty, is in the eye of the beholder and is not a quality inherent in any remark, event or situation...  
Irony's form and functions are so diverse as to seem scarcely amenable to a single definition*

Douglas Muecke

## Journey back in time on the characteristics of irony

Language-oriented philosophers (e.g. Grice, 1975; Searle, 1979) pictured irony as deviant use of code, convenient to smuggle in (implicitly) unwelcome messages; it is a face-saving hidden expression of implicit criticism.

- 1) Irony is explained as a figure of speech that flouts the maxim of quality (Grice, 1975) and implies the contradiction of what is literally expressed. It is characterized by opposition and substitution between two levels of meaning. It is an Aristotelian blame-by-praise figure. What the speaker literally says should be taken to mean 'something else', conveniently assumed to be the exact or relative opposite of what is said.

But...

"There would be no motivation to use nonliteral language if literal language could be used instead. Thus, it must be that irony is not equivalent to its literal paraphrase, however close is that paraphrase" (Dews, Kaplan, Winner, 1995).

There must be more to irony than just a substitution or opposition of literal language.

- 2) Irony can be ambiguous in at least two ways and is subject to interpretation.

Irony requires background knowledge and cannot exist without a context (linguistic: what is said, by whom to whom, situational and mental: what is expected, anticipated, felt). Only a certain context can make this utterance ironic. Only a certain context can make a situation ironic. Only if the hearer knows the circumstances (for example, the speaker and the hearer are standing in the rain together) it is possible for a comment: What lovely weather! to be recognized as ironic. Thus, any theory of irony that does not take the context into account must fail (Blakemore, 1992, p. 170).

Irony has also been seen in the context of politeness in language. Brown and Levinson (1987, p. 221) list irony as one of their off-record strategies, giving it a face-saving function. Leech (1983) even proposes an Irony Principle ("If you must cause offence, at least do so in a way which doesn't overtly conflict with the PP [Politeness Principle], but allows the hearer to arrive at the offensive point of your remark indirectly, by way of implicature", p. 82), which helps to avoid open conflict and thus rescues the Politeness Principle on a different level.

- 3) Irony is a pretense (Clark and Gerrig, 1984).

Clark introduces a new focus on irony, stressing the fact that every ironical utterance is a joint pretense that requires some sort of coordination of the

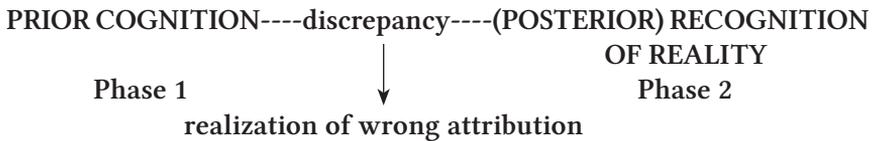
speaker’s and the hearer’s actions. The ironic speaker is pretending to be someone else and ridicules the opinion and the person it is attributed to.

- 4) Irony is a metacommunicative ability (which is one of the metarepresentational abilities, like mind reading ability, for example) to infer a speaker’s intentions from his or her utterances (Sperber and Wilson, 2002).
- 5) Irony is an echo (Sperber and Wilson, 1981, 1984). Irony is an echoed thought which carries a negative attitude (Sperber and Wilson, 1998): the speaker echoes an implicitly attributed thought while at the same time dissociating himself or herself in attitude from that thought; it allows for more or less ironical shades.

“Verbal irony, we argue, invariably involves the expression of an attitude of disapproval...The speaker echoes a thought she attributes to someone else, while dissociating herself from it with anything from mild ridicule to savage scorn” (Wilson and Sperber, 1992, p. 60)

Speakers dissociate themselves from an echoed opinion since it is simply contrary to the state of affairs or truth. There is an underlying proposition which the speaker thinks ought to be true.

- 6) Irony is a cognitive quality: for verbal irony to occur, prior cognition is mapped into a linguistic form (Hamamoto, 1998). “Cognition of irony” is defined as recognition of the discrepancy which lies between the posterior and prior cognition of some relevant event or thing:



*There is a CONTRARY RELATION between P & -P*  
*P = prior expectation*  
*-P = posterior identification of a certain event/thing*

- 7) Irony is a tool to convey a feeling of internal discomfort between reality and expectations/ prior cognition. According to Hamamoto, this discrepancy between two cognitions (also discrepancy on the level of linguistics) creates attitudes of ridicule and scorn toward the situation in which one is located. If one wants to express this sentiment verbally, one utters the prior cognition with a specific tone and the result is an ironic utterance.
- 8) Irony is an indirect negation (Giora, 1995).
- 9) Irony is “a technique of saying as little and meaning as much as possible...” (Frye, 1957, p. 40 after Yamanashi, 1998, p. 278)

- 10) Is irony intentional? Is the speaker always intentionally ironic in utterances which are interpreted ironically? Hamamoto's answer: irony is NOT always ostensive (intentional).

“Cognition of irony has been formed in the speaker's mind before he actually puts it into words and a hearer may judge an utterance as ironical even when a speaker unintentionally conveys something which works as a trigger to form cognition of irony in the hearer's mind” (Hamamoto, 1998: 265). However, personally I am inclined to take the attitude that verbal irony is always purposeful (intentional) if it originates from an ironic situation. Every ironic comment requires an ironic situation (context), however ironic comment may also create an ironic situation and only this situation might, I believe, provoke unintentional irony.

- 11) Irony must be implicit (the charm of irony is that it leaves the listener a little up in the air as to whether the speaker is ironical or not, (Seto, 1998, p. 252; Householder, 1971).

## Background

### More than words... Social functions of irony

The question is: What are the payoffs of using irony? Why would we use irony if we could equally well express ourselves in literal language?

It's not rocket science to state that irony communicates more than it says. This trick of saying one thing and meaning another is most apparently based on dichotomy (Barbe, 1995) or discrepancy (Hamamoto, 1998) and serves various communicative functions (e.g. politeness, emotion display, funniness, lessening discontent, enhancing criticism).

Experiments by Kreuz, Long, and Church (1991) showed that humor was identified more likely as a communication goal of irony than of literal language.

Brownell, Jacobs, Gardner, and Gianoulis (1990) found that people rated ironic criticism as “meaner” than literal criticism, and Kreutz et al. (1991) found that subjects chose “mocking” as a communication goal of irony.

Dews, Kaplan and Winner (1995) proposed the Tinge Hypothesis and tinge function of irony, namely muting the aggression expressed in criticism and moderating the praise communicated in a complement.

Kreutz and Glucksberg (1989) and Roberts and Kreutz (1994) noted that irony brings humor. Also, examination of adults' perceptions indicates that ironic remarks are often viewed as funnier and more playful than literal remarks (Gibbs, 2000; Kreutz et al., 1991) and that ironic speakers tend to be viewed as humorous (Pexman and Olineck, 2002). These results seem especially interesting when we collate these figures with several studies on children, which show that though they appreciate the muting function of verbal irony they do not show appreciation

of the humor in irony. A study by Glenwright and Pexman (2010) on children's perception of the social functions of verbal irony provided support for the Tinge Hypothesis but, interestingly, also revealed that the humor function was not recognized by 5- to 8-year-old children.

### **How are emotions and attitude relevant for irony?**

Experimental evidence (e.g. Tomasello et al., 2005; Tomasello, 2008) shows that emotional content attached to a message plays a significant role in communication, bridging or widening the intended meaning gap. Damasio (1994) observes that we are never devoid of affect. If pragmatics is to account for the gap between what people say and what they mean, it needs to account for how they feel about what they say.

Pexman and Olineck (2002) found that ironic arguments could have the intention of being more hurtful, but may not be rated as negatively as a literal argument of the same caliber. Considering there may be some variability in the acceptance of an ironic statement, Jorgensen (1996) argues that in order to consider whether sarcasm or irony can be an effective mode of communication, one must learn more about the perceptions of the recipient of such an attack. Toplak and Katz (2000) argue that sarcasm can have a negative affective response, especially from mocking humor. Irony, on the other hand, has been associated with face-saving of either the speaker or the listener. In other words, sarcasm is seen as negative more generally while irony can, sometimes, have a more positive reaction based on an individual's predisposition. Attitude conveyed by ironic comments has also been recognized as substantial for irony comprehension in the works of the following authors: Sperber and Wilson, 1981, 1986, 1991; Wilson and Sperber, 1992; Clark and Gerrig, 1984; Kreuz and Glucksberg, 1989; Barbe, 1995; Kumon-Nakamura et al., 1995.

Attitude construct is also central to social psychology (e.g. Eagly and Chaiken, 1993) due to its prime impact on interpersonal interactions. Since Thurston's definition (1931, p. 261) of attitude as "affect for or against a psychological object," attitudes have been researched as favorable/unfavorable feelings about, evaluative characterizations of, and action predispositions toward stimuli. This approach reflects empirical evidence showing that attitudes are reducible to the net difference between the positive and negative value they convey (Allport, 1935; Lewin, 1935; Ito, Cacioppo, 2000; Ito, Cacioppo, 2001; Ito, Cacioppo, 2005). Evaluation is a basic, core ingredient of any attitudinal disposition and refers to overt, covert, cognitive, or affective response to evaluative contents. Evaluative dispositions are "a type of bias that predisposes the individual toward evaluative responses that are positive or negative" (Eagly and Chaiken, 1993). Cacioppo and Berntson (1994) add that attitudes as positive/negative affect toward stimuli generate two basic dispositions: attraction and aversion. Attitudinal responses are evaluative, and evaluation is connected with the imputation of some degree of goodness or badness to an entity (Lewin, 1935). Valence refers to intrinsic attractiveness

(positive valence) and aversiveness (negative valence) of an event, situation, object or stimulus (Lewin, 1935; Damasio, 1994), thus affective valuation should be viewed as an integral part of meaning.

## Study

The study examined how adults use and understand irony. The study aimed to shed light on the layperson's idea of irony in order to redefine the concept and scope of irony in social interactions. The central questions asked in this paper were:

- How does emotional and attitudinal valence (positive or negative evaluation of irony and interpretation of ironic stimuli) impact communication and comprehension of ironic comments?
- How does performance IQ correlate with subjective and individual perception of irony?
- How do people differ in the attribution of positive and negative emotions to ironic contexts?

I considered the emotional layer in irony, i.e. whether the concept of irony is perceived as positive, negative or neutral by the respondents, to be of great value because I assumed that its 'emotional impact' would (presumably) reflect the frequency of use of irony and comprehension of its social functions. In everyday communication, on top of what we say we smuggle in our emotions, feelings and attitudes. Various neuroimaging and social studies emphasize the role of emotional load in influencing the way we process information.

The research aimed to investigate why people use irony rather than say what they mean directly and why certain people use it more than others. Following a vast discrepancy in the experimental results of many previous studies, it was of interest to see whether irony actually sharpens or mutes the level of aggression/discontentment/criticism/complaint conveyed in a direct message. I also wanted to see whether ironic remarks are perceived as more positive or more negative when compared to direct literal statements.

The study also verified if performance on IQ tests is a good predictor of irony comprehension and willingness to use irony. Through the analysis of a self-report questionnaire about irony correlated with WAIS-R (PL) 2004 we could compare the results and see if: a) people who considered themselves to be more ironic actually performed better on nonverbal intelligence tasks or b) people who thought of themselves as ironic and declared they used irony were not higher on WAIR-R (PL) 2004 but had favorable feelings about irony.

## Participants

Fifty-three Polish-speaking adult subjects aged 20-66 years (28 females and 26 males) participated in Study 1 and answered a six-item self-report question-

naire about irony. Out of the 54 participants in Study 1, 45 subjects (21 males and 24 females) were tested in Study 2 with performance subtests of the Wechsler Intelligence Scale-Revised-Polish versions (WAIS-R(PL) 2004).

The research design was balanced for gender.

## Method

In Study 1 adults were tested for their comprehension of the concept of irony and its emotional valence, their self-perception of being ironic or non-ironic and their attitude to irony understood here as the social functions of ironic comments.

In lieu of a verbal irony task [scenarios/stories wherein a speaker makes a literal criticism, ironic criticism, a literal complement or an ironic complement, and the participant is asked to rate the statement], irony comprehension was assessed using a self-report questionnaire. Participants were asked to respond to a six-item self-report questionnaire about their attitude to irony. The questionnaire measured the self-perceived quality of irony.

An open-ended probe question was used to assess the notion and understanding of what irony is. The adults were also asked if they perceived themselves as ironic and they were requested to justify their responses, i.e. when and in what situations they would use irony. The participants rated their emotional attitude on a three-point scale, wherein emotions could be evaluated on a continuum from negative through neutral to positive.

The last item in the questionnaire presented the most common form of irony used to comment on a situation/fate (saying "Great weather" when it is pouring), i.e. ironic criticism, in which the speaker says something positive to convey a negative attitude. It is important to note that the object of the (ironic) remark was neither performance nor behavior but a neutral unfavorable situation, not aimed at criticizing anybody and not requiring a face-saving technique as there was no face to lose. The question was designed to assess subjects' understanding of the communicative and social intentions of the speaker and to indicate their attitude to the speaker's utterance. The answers were coded for positive vs. negative value, i.e. muting or reinforcing the criticism/negative message.

**Coding system:** Answers regarding subjective emotions associated with irony were coded as either positive, positive/negative, neutral or negative evaluation. Proportions were calculated. The adults' responses were also coded separately for the emotional value with regard to the social function of ironic utterances as: positive (lessening negative message), positive/negative (depends on the situation) or negative (reinforcing discontentment and conveying more anger and more meanness).

Of course, there are some problems with self-report questionnaires. Respondents can propose a biased perception of themselves, they can exaggerate or belittle their ironic competences and thus distort the data. Knowing what "irony" is or thinking of oneself as an "ironic person" does not necessarily imply

using irony in real life. Self-perception might not always reflect the reality and actual state of affairs. It was interesting, however, to see if and how the reported attitude construct and affective valence of irony would impact the perception and identification of oneself as a more or less ironic person. Through inter-correlations across words we could see if subjects who evaluated irony positively also considered themselves to be more ironic compared to those who rated irony as a negative phenomenon.

*Study 2:* The adults were administered the Wechsler Adult Intelligence Scale Revised (WAIS-R). The performance subtests of WAIS-R, a revised form of the WAIS were: Picture Arrangement, Picture Completion, Block Design, Object Assembly, and Digit Symbol. Performance IQ results were obtained for 45 subjects aged 20-66 years (24 females and 21 males) who also participated in Study 1.

I was interested to see whether adults who rated themselves as more ironic (higher in the irony comprehension questionnaire) actually scored higher on the performance subtests. A performance IQ score was created by summing across the sub-tests (items).

The emotional valence of the ironic meaning, self-perception of the frequency of use of irony and emotional attitude ascribed to the social functions of ironic remarks were related to the performance intelligence quotient (IQ) which was measured in Study 2 using the Wechsler Adult Intelligence Scale-Revised WAIS-R (PL) 2004.

## Results

### What is irony?

The results suggest that irony and mockery are often interchangeable in the eyes of the participants and irony is “saying the opposite of what is true in order to underline the truth.” Irony was described as something subtle, elusive, witty and smart.

The study also showed that men would use irony with the aim to amuse others, to make fun and to be perceived as funny, whereas women would rather use it to show their disapproval and smuggle in more anger and meanness.

Men reported that irony helped them to find an emotional distance from a difficult or absurd situation. It was reported as a self-help technique. It was observed with higher frequency by male participants that irony acts as a vent for frustration and is a technique to deal with difficult stressful situations that we can do nothing more about, like politics, for example. On the other hand, women reported using irony as a means of being nasty and mean in a more covert, face-saving way. Women reported it was important that irony leaves the benefit of the doubt and some room for varied interpretations and guessing. It was described as a way to criticize an oppressor but not openly, so as to avoid punishment. It seemed that female subjects would use it to circumvent a direct attack yet with the intention to render their disapproval or dissatisfaction stronger however

Table 1. Correlations for performance IQ, emotions and self-perception of being ironic

		Performance IQ	Are you ironic?
Performance IQ	Pearson Correlation		0.376*
	Sig. (2-tailed)		0.011
	N	45	45
Emotions	Pearson Correlation	0.14	0.333*
	Sig. (2-tailed)	0.332	0.025
	N	45	45

\* Correlation is significant at the 0.05 level (2-tailed)

still remain polite on the surface and save their face. Men, by contrast, reported they use irony for polemical purposes and it constitutes an opening remark to conversation. For men, ironists try to elicit solidarity and understanding from their audience. It is a technique, a way to achieve solidarity with others and to experience relief. Men see humor in irony and use it for fun and to ease criticism. Women express ideas ironically, sometimes with a pinch of humor, so as to complain more and when they want to be mean. They also take it as such.

Importantly, contradiction and reversal were mentioned as the most important categories associated with irony (37%) along with “the act of mockery” (28%).

The words women would use to describe irony are: means of expressing emotions; non-conventional expression of disapproval; subtle joke; malevolence expressed in a funny way; spiteful doublespeak; intelligent reply; figure of speech; feature of character; the act of mocking; biting comment; sense of humor; metaphor; discrepancy with the truth; malice; spite; ridicule; derision.

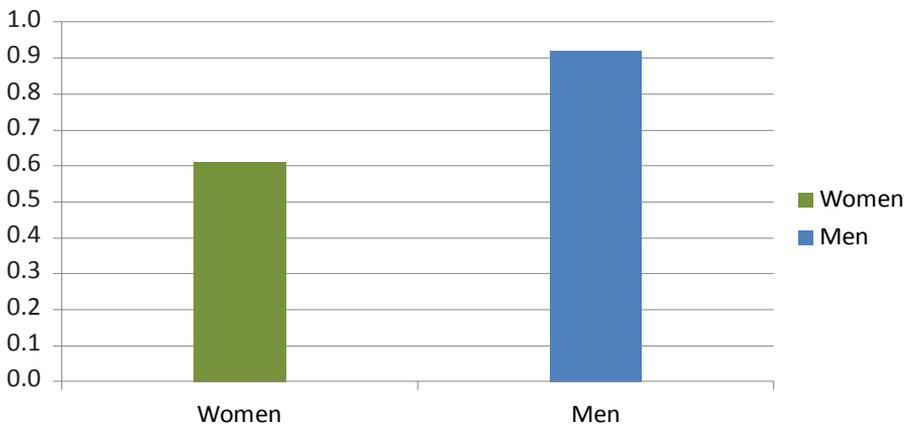
The words men would use to describe irony are: ridicule; act of mockery; funny way of providing information; immune system that protects from daily nonsense; untruth; social conduct; ability to see things from a different angle; derisory way of perceiving reality; technique of communication; funny comment; jeer; way of being.

### Irony and IQ

Qualitative analysis of the self-report questionnaires completed by subjects confirmed a common perception of irony as the expression of sophistication and wit, intelligence and higher level information production and processing. Questionnaire responses about emotions, attitude and the self-perceived frequency of using irony were correlated with IQ test (Table 1).

The correlation between IQ and the self-perception of being ironic (affirmative response to the question: Are you ironic?) was moderate but significant ( $r(43) = 0.38, p < 0.05$ ). Subjects who perceived themselves as ironic showed a

Figure 1. Gender differences in the self-perception of being ironic



higher nonverbal IQ in comparison to subjects who described themselves as non-ironic or barely ironic.

Participants who rated themselves as ironic might have a tendency to be more accepting of ironic statements than those who rated themselves lower in irony. An independent samples t-test indicated also that men ( $M = 0.92$ ,  $SD = 0.28$ ) rated themselves as more ironic than women ( $M = 0.61$ ,  $SD = 0.49$ ),  $t(52) = 2.90$ ,  $p < 0.05$ ,  $d = 0.78$ .

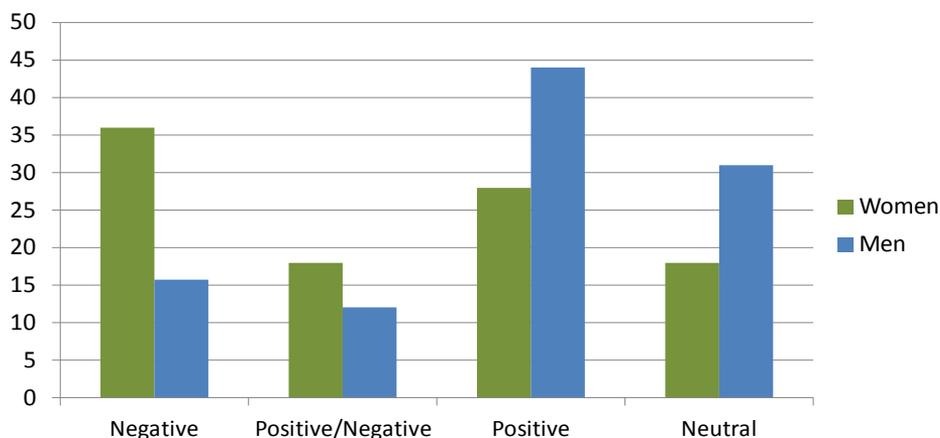
### Irony and emotions

Subjects who recognized themselves as ironic showed a tendency to attribute positive emotions to irony. Men described themselves as more ironic in comparison with female subjects (Pearson's  $r(43) = 0.38$ ,  $p < 0.05$ ). The figure below shows the frequencies of different types of emotions the male and female participants associated with irony.

Women made negative judgments of the intentions of speakers when faced with verbal irony. Conversely, the majority of men looked on the bright side of the ironic comment. Men reasoned that irony serves to bond the speaker and addressee by giving them a secret code, it was also seen as encouragement to interaction and a means to laugh about an unpleasant situation and make light of it. Men emphasized that irony carries an important message to the listener, who becomes the recipient of the intended and intentional code that is not accessible to just anyone. Conversely, women claimed that ironic remarks are somewhat blurred and it is left up to the addressee to decide how to interpret an utterance.

According to the subjects, irony carries more emotional load than literal statements. It is emotionally stronger, thus more subjective, and might reveal

Figure 2. Different types of emotions associated with irony and balanced by gender



more personal involvement in the comment and interaction. It actually suggests that the observation on bonding through irony seems quite legitimate.

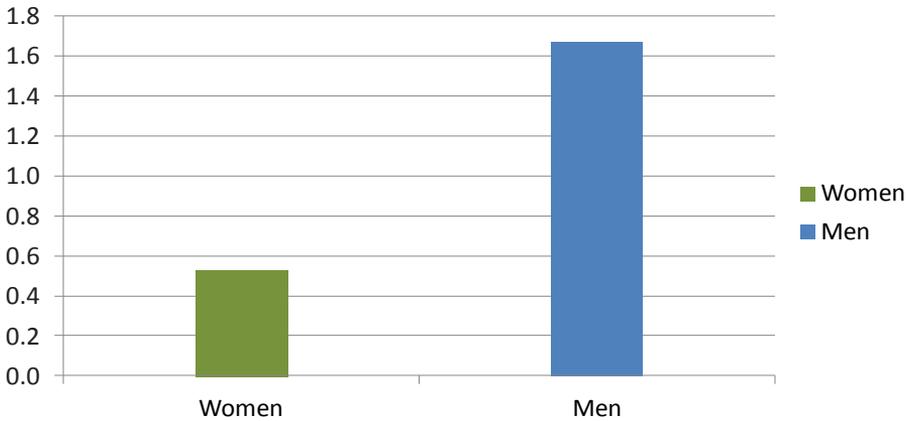
**Irony and attitude**

The analysis of responses to the question: “Why would you or somebody say ‘It’s lovely weather’ in a downpour when planning to go out for a picnic?”, i.e. an unpleasant situation that is beyond anyone’s control, revealed that irony can be used both to enhance and to reduce the amount of criticism and negative emotions. Interestingly, the results demonstrate that females and males have a different appreciation of irony. The ironic remark about the weather was less critical than a literal comment only for men ( $M = 1.69, SD = 0.68$ ), whereas it was actually perceived as more critical than a direct statement by women ( $M = 0.54, SD = 0.68$ ),  $t(52) = 5.40, p < 0.05, d = 1.46$ .

The results of the analyses performed with the independent-samples T test comparing males and females on the affective valuation of ironic context indicate a clear extreme bipolar negative/positive perception of other people’s attitudes in social situations. The results by no means disparage the importance of the context, but they might indicate the existence of some internal affective valuation imprints easily accessible in the context of ambiguous social meanings.

The majority of men perceived ironic speakers/comments in a positive way, as being humorous and having less negative impact, showing an opposite pattern in comparison with women, who tended to associate negative emotions with ironic contexts. Men noted that ironic remarks about a shared situation might have more of a bonding effect when the speaker and addressee are strangers. Humor-

Figure 3. Gender effects in the affective valence of an ironic comment



ous ironic comments in stressful situations could relieve anxiety. Literal remarks would be perceived more negatively because the speaker is directly complaining and could be seen as “bringing down” the mood of the addressee. Men would look at irony in terms of a positive and helpful communication technique, where the positive surface attenuates the critical meaning, while the majority of female subjects declared their negative attitude to ironic comments and stated that the positive surface renders the message more negative in its affective valence.

These findings add to previous work partially supporting the Tinge Hypothesis (Dews and Winner, 1995) that ironic criticism is used to reduce the amount of condemnation, but they also demonstrate the opposite and support the suggestion that ironic criticism is less aggressive than literal criticism (Brown and Levinson, 1987).

The results indicate that men use irony to mute critical messages, which contrasts with women’s perception of ironic comments, since women reported using irony in order to enhance their dissatisfaction. It seems, therefore, that irony makes criticism gentler just as it renders it stronger. Either way, however, undoubtedly it adds emotional value and makes the message more emotionally marked and powerful.

## Discussion

Data analyses show that performance IQ correlates positively with the subjective and individual perception of being ironic. It would probably be interesting to see if subjects who described themselves as ironic in the self-report questionnaire proved to be ironic in real-life situations. It might seem evident

that the higher the performance on IQ tests, the more ironic the personality, but the positive correlation between intelligence and use of irony is not that obvious and still open to question. For example, a previous study by M. Shuliang, S. Yanjie, C.K. Raymond, and J.L. Chanb (2008) showed that the comprehension of irony was not significantly related to theory of mind and IQ. Also, verbal IQ (measured with the Wechsler Adult Intelligence Scale-Revised) did not explain the deficit of irony comprehension in patients with schizophrenia.

The results of the study described in this paper do not show any significant correlation between nonverbal IQ and positive emotional valence of irony, however they indicate a moderate correlation between positive emotions and the reported frequency of use of irony, quite similarly to the results presented by Ivanko, Pexman, and Olineck (2004), who developed a sarcasm self-report scale and found that participants who rated themselves as highly sarcastic were more accepting of sarcastic and ironic statements than those who rated themselves lower in sarcasm. It was also found that, more specifically, men rated themselves as significantly more sarcastic than women. A similar gender effect with relation to irony was noted in my research.

The analyses of empirical data presented in this paper revealed gender effects in the attribution of positive and negative emotions to ironic contexts. Literal criticism was found to be more negative than ironic criticism only in men, whereas women believed that literal comment was less snide and nasty than an ironic remark. A negative interpretation of the attitude of the male ironic speaker could lead the female listener to be more easily offended when the intention of the speaker was to joke and ease the situation. The gender effect may be explained within a broader category of individual differences, which might result from the fact that different individuals, whether female or male, are provided with different social exposure. Different people may not have the same experiences, of which figurative language is a part. It is also worth noting that quite a few participants described irony as a feature of character and an individual disposition, yet little is known about the role of individual differences in social interactions involving irony or figurative language in general. For example, several lines of previous studies indicate that anxious children have an interpretation bias for ambiguous information, leading them to interpret ambiguous stimuli as threatening (Taghavi, Moradi, Neshat-Doost, Yule, and Dalglish, 2000). Also, anxious children tend to interpret ambiguous scenarios as threatening and to suggest avoidant responses (Chorpita, Albano and Barlow, 1996). Another study on individual differences in children explored associations between verbal irony comprehension and shyness (Mewhort-Buist and Nielsen, 2012) and reported that shy children ascribed a greater degree of negative attitude to speakers who made ironic criticisms. It was also demonstrated that children higher in shyness showed less appreciation of the irony muting effect. This might also be the case with irony and women. It could be

that women perceive irony as more negative because they experience higher levels of anxiety or shyness than men and thus see irony (figurative/ambiguous messages) as more threatening, so this attitude generates aversion rather than attraction to ironic comments.

A higher level of anxiety could account for the misperception of ironic (ambiguous) comment as threatening, i.e. more negative and critical than its literal (unambiguous) counterpart. In my study, females ascribed a greater degree of negative attitude to ironic comments, and this might be due to their higher level of anxiety as compared with men.

These gender effects found in the presented research converge with the results of the study by H.E. Recchia, N. Howe, H.S. Ross, and S. Alexander (2010) which showed that in the context of naturalistic positive and negative family conversations in the home, mothers were especially likely to ask rhetorical questions and to use ironic language in conflictual contexts. In contrast, fathers used hyperbole and understatement as frequently as rhetorical questions, and employed ironic language in both positive and conflictual contexts. Overall, the results suggest that family conversations in the home may be one important context for the development of children's use and understanding of ironic language.

Positive and negative bias in the affective valence of irony and the attitude to its social functions seems especially interesting in light of the study on children's understanding of the meaning and functions of verbal irony conducted by S. Dews, E. Winner, J. Kaplan, E. Rosenblatt, M. Hunt, K. Lim, A. McGovern, A. Qualter, and B. Smarsh (1996). They showed that ratings of humor increased with age while ratings of meanness did not (showing that children and adults perceived irony as more muted than literal criticism), and sensitivity to the muting function developed prior to sensitivity to the humor function.

## Conclusions

This study recognized the implicit affective evaluation communicated by irony and acknowledged diversified emotional loads communicated and comprehended in ironic messages. Also, the results of the study, which show that men and women perceive ironic remarks differently, could shed some new light on the role of individual differences in the perception of irony. The take-home message is that we look at one thing but we do not see the same. Figurative language and ambiguous situations can never be devoid of subjectivity and free of interpretation through unique personal experience. Gender is not purely a biological or social disposition, it is a perception, and irony is a way of seeing things, of experiencing things, encoding and decoding meanings. Irony in communication is always dynamic, created and re-created in the process of interaction and interpretation between the originator and the recipient. Irony

is a means used not only to deliver a description of circumstances, but on top of this it conveys attitude and involves feelings on both sides of the communication channel.

## Acknowledgments

The present paper is based on the author's PhD dissertation under the supervision of Barbara Bokus (in preparation).

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